

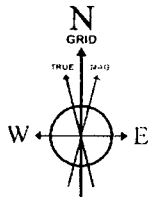
Cimarex Energy Co.

Location: Lea County, NM
Field: (Lynch) Sec 23, T20S, R34E
Facility: Lynch 23 Fed Com No. 2H

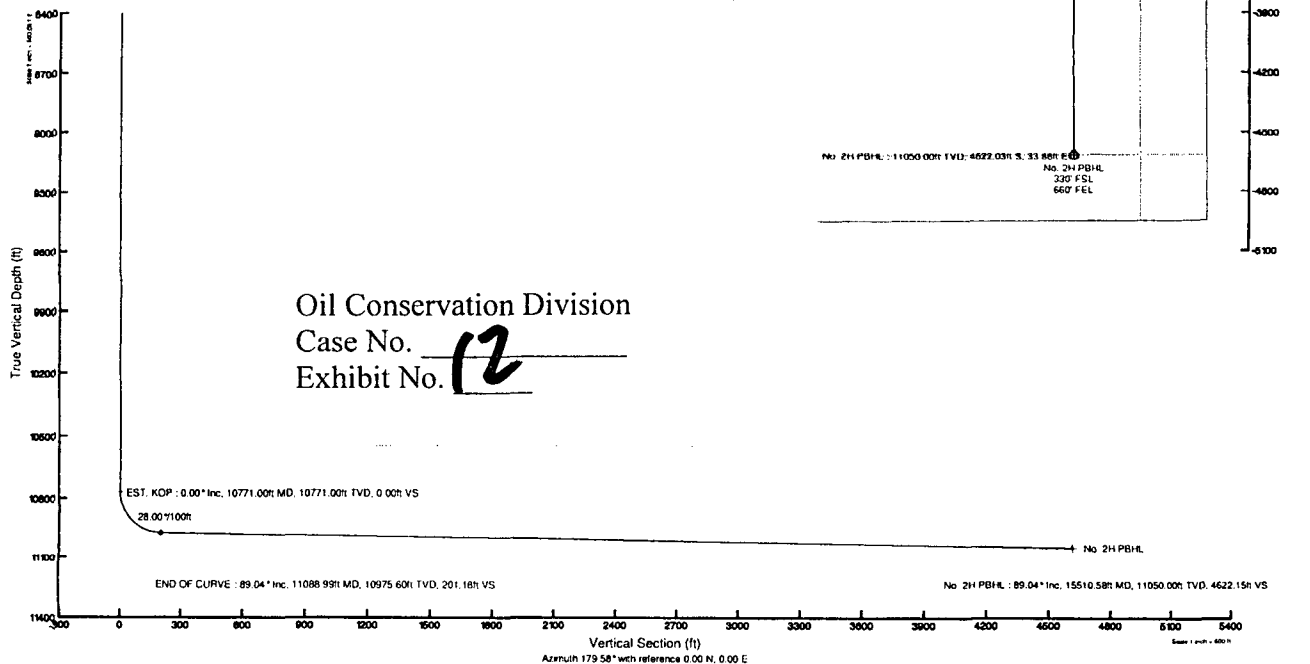
Slot: No. 2H SHL
Well: No. 2H
Wellbore: No. 2H PWB

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	179.580	0.00	0.00	0.00	0.00	0.00
EST. KOP	10771.00	0.000	179.580	10771.00	0.00	0.00	0.00	0.00
END OF CURVE	11088.99	89.036	179.580	10975.60	-201.18	1.47	28.00	201.18
No. 2H PBHL	15510.58	89.036	179.580	11050.00	-4622.03	33.86	0.00	4622.15

Pick reference wellbore is Platin 1	
True vertical depth and referenced to Rig on No. 2H SHL (RT)	Grid System: NAD83 / 1st New Mexico State Plane, Eastern Zone (2011), US feet
Measured depth and referenced to Rig on No. 2H SHL (RT)	North Reference: Grid north
Rig on No. 2H SHL (RT) to Mean Sea Level: 3657 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Lynch 23 Fed Com No. 2H): 3657 feet	Depth are in feet
Coordinates are in feet referenced to Facility Center	Created by: Victor Hernandez on 10/18/2010



BGGM (1945.0 to 2011.0) Dip: 60.55° Field: 48964 nT
Magnetic North is 7.70 degrees East of True North (at 10/19/2010)
Grid North is 0.44 degrees East of True North
To correct azimuth from True to Grid subtract 0.44 degrees
To correct azimuth from Magnetic to Grid add 7.26 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.26 = 97.26





Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Lynch) Sec 23, T20S, R34E	Wellbore	No. 2H PWB
Facility	Lynch 23 Fed Com No. 2H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.99998	Report Generated	10/19/2010 at 10:03:25 AM
Convergence at slot	0.44° East	Database/Source file	WA_Midland/No. 2H_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W
Facility Reference Pt			790531.40	570212.70	32°33'53.883"N	103°31'28.068"W
Field Reference Pt			789361.60	570203.60	32°33'53.881"N	103°31'41.737"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No. 2H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 2H SHL (RT) to Mean Sea Level	3657.00ft
Vertical Reference Pt	Rig on No. 2H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 2H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.58°



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Lynch) Sec 23, T20S, R34E	Wellbore	No. 2H PWB
Facility	Lynch 23 Fed Com No. 2H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	179.580	0.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	Tie On
100.00†	0.000	179.580	100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
200.00†	0.000	179.580	200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
300.00†	0.000	179.580	300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
400.00†	0.000	179.580	400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
500.00†	0.000	179.580	500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
600.00†	0.000	179.580	600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
700.00†	0.000	179.580	700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
800.00†	0.000	179.580	800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
900.00†	0.000	179.580	900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1000.00†	0.000	179.580	1000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1100.00†	0.000	179.580	1100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1200.00†	0.000	179.580	1200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1300.00†	0.000	179.580	1300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1400.00†	0.000	179.580	1400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1500.00†	0.000	179.580	1500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1600.00†	0.000	179.580	1600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1700.00†	0.000	179.580	1700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1800.00†	0.000	179.580	1800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
1900.00†	0.000	179.580	1900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2000.00†	0.000	179.580	2000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2100.00†	0.000	179.580	2100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2200.00†	0.000	179.580	2200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2300.00†	0.000	179.580	2300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2400.00†	0.000	179.580	2400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2500.00†	0.000	179.580	2500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2600.00†	0.000	179.580	2600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2700.00†	0.000	179.580	2700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2800.00†	0.000	179.580	2800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
2900.00†	0.000	179.580	2900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Lynch) Sec 23, T20S, R34E	Wellbore	No. 2H PWB
Facility	Lynch 23 Fed Com No. 2H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3000.00†	0.000	179.580	3000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3100.00†	0.000	179.580	3100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3200.00†	0.000	179.580	3200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3300.00†	0.000	179.580	3300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3400.00†	0.000	179.580	3400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3500.00†	0.000	179.580	3500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3600.00†	0.000	179.580	3600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3700.00†	0.000	179.580	3700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3800.00†	0.000	179.580	3800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
3900.00†	0.000	179.580	3900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4000.00†	0.000	179.580	4000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4100.00†	0.000	179.580	4100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4200.00†	0.000	179.580	4200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4300.00†	0.000	179.580	4300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4400.00†	0.000	179.580	4400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4500.00†	0.000	179.580	4500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4600.00†	0.000	179.580	4600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4700.00†	0.000	179.580	4700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4800.00†	0.000	179.580	4800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
4900.00†	0.000	179.580	4900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5000.00†	0.000	179.580	5000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5100.00†	0.000	179.580	5100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5200.00†	0.000	179.580	5200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5300.00†	0.000	179.580	5300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5400.00†	0.000	179.580	5400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5500.00†	0.000	179.580	5500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5600.00†	0.000	179.580	5600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5700.00†	0.000	179.580	5700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5800.00†	0.000	179.580	5800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
5900.00†	0.000	179.580	5900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Lynch) Sec 23, T20S, R34E	Wellbore	No. 2H PWB
Facility	Lynch 23 Fed Com No. 2H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6000.00†	0.000	179.580	6000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6100.00†	0.000	179.580	6100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6200.00†	0.000	179.580	6200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6300.00†	0.000	179.580	6300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6400.00†	0.000	179.580	6400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6500.00†	0.000	179.580	6500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6600.00†	0.000	179.580	6600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6700.00†	0.000	179.580	6700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6800.00†	0.000	179.580	6800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
6900.00†	0.000	179.580	6900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7000.00†	0.000	179.580	7000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7100.00†	0.000	179.580	7100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7200.00†	0.000	179.580	7200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7300.00†	0.000	179.580	7300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7400.00†	0.000	179.580	7400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7500.00†	0.000	179.580	7500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7600.00†	0.000	179.580	7600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7700.00†	0.000	179.580	7700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7800.00†	0.000	179.580	7800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
7900.00†	0.000	179.580	7900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8000.00†	0.000	179.580	8000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8100.00†	0.000	179.580	8100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8200.00†	0.000	179.580	8200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8300.00†	0.000	179.580	8300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8400.00†	0.000	179.580	8400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8500.00†	0.000	179.580	8500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8600.00†	0.000	179.580	8600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8700.00†	0.000	179.580	8700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8800.00†	0.000	179.580	8800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
8900.00†	0.000	179.580	8900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Lynch) Sec 23, T20S, R34E	Wellbore	No. 2H PWB
Facility	Lynch 23 Fed Com No. 2H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9000.00†	0.000	179.580	9000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9100.00†	0.000	179.580	9100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9200.00†	0.000	179.580	9200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9300.00†	0.000	179.580	9300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9400.00†	0.000	179.580	9400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9500.00†	0.000	179.580	9500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9600.00†	0.000	179.580	9600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9700.00†	0.000	179.580	9700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9800.00†	0.000	179.580	9800.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
9900.00†	0.000	179.580	9900.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10000.00†	0.000	179.580	10000.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10100.00†	0.000	179.580	10100.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10200.00†	0.000	179.580	10200.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10300.00†	0.000	179.580	10300.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10400.00†	0.000	179.580	10400.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10500.00†	0.000	179.580	10500.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10600.00†	0.000	179.580	10600.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10700.00†	0.000	179.580	10700.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	
10771.00	0.000	179.580	10771.00	0.00	0.00	0.00	790531.40	570212.70	32°33'53.883"N	103°31'28.068"W	0.00	EST. KOP
10800.00†	8.120	179.580	10799.90	2.05	-2.05	0.02	790531.42	570210.65	32°33'53.883"N	103°31'28.068"W	28.00	
10900.00†	36.120	179.580	10891.62	39.33	-39.33	0.29	790531.69	570173.37	32°33'53.494"N	103°31'28.068"W	28.00	
11000.00†	64.120	179.580	10955.11	115.31	-115.31	0.84	790532.24	570097.40	32°33'52.742"N	103°31'28.068"W	28.00	
11088.99	89.036	179.580	10975.60	201.18	-201.18	1.47	790532.87	570011.53	32°33'51.893"N	103°31'28.068"W	28.00	END OF CURVE
11100.00†	89.036	179.580	10975.78	212.20	-212.19	1.55	790532.95	570000.51	32°33'51.784"N	103°31'28.069"W	0.00	
11200.00†	89.036	179.580	10977.47	312.18	-312.18	2.29	790533.69	569900.53	32°33'50.794"N	103°31'28.069"W	0.00	
11300.00†	89.036	179.580	10979.15	412.17	-412.16	3.02	790534.42	569800.55	32°33'49.805"N	103°31'28.069"W	0.00	
11400.00†	89.036	179.580	10980.83	512.16	-512.14	3.75	790535.15	569700.57	32°33'48.816"N	103°31'28.069"W	0.00	
11500.00†	89.036	179.580	10982.51	612.14	-612.12	4.48	790535.88	569600.59	32°33'47.826"N	103°31'28.070"W	0.00	
11600.00†	89.036	179.580	10984.20	712.13	-712.11	5.22	790536.62	569500.61	32°33'46.837"N	103°31'28.070"W	0.00	
11700.00†	89.036	179.580	10985.88	812.11	-812.09	5.95	790537.35	569400.63	32°33'45.848"N	103°31'28.070"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Lynch) Sec 23, T20S, R34E	Wellbore	No. 2H PWB
Facility	Lynch 23 Fed Com No. 2H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11800.00†	89.036	179.580	10987.56	912.10	-912.07	6.68	790538.08	569300.65	32°33'44.858"N	103°31'28.071"W	0.00	
11900.00†	89.036	179.580	10989.25	1012.08	-1012.06	7.41	790538.81	569200.66	32°33'43.869"N	103°31'28.071"W	0.00	
12000.00†	89.036	179.580	10990.93	1112.07	-1112.04	8.15	790539.55	569100.68	32°33'42.880"N	103°31'28.071"W	0.00	
12100.00†	89.036	179.580	10992.61	1212.06	-1212.02	8.88	790540.28	569000.70	32°33'41.890"N	103°31'28.072"W	0.00	
12200.00†	89.036	179.580	10994.29	1312.04	-1312.00	9.61	790541.01	568900.72	32°33'40.901"N	103°31'28.072"W	0.00	
12300.00†	89.036	179.580	10995.98	1412.03	-1411.99	10.34	790541.74	568800.74	32°33'39.912"N	103°31'28.072"W	0.00	
12400.00†	89.036	179.580	10997.66	1512.01	-1511.97	11.08	790542.48	568700.76	32°33'38.922"N	103°31'28.073"W	0.00	
12500.00†	89.036	179.580	10999.34	1612.00	-1611.96	11.81	790543.21	568600.78	32°33'37.933"N	103°31'28.073"W	0.00	
12600.00†	89.036	179.580	11001.02	1711.99	-1711.94	12.54	790543.94	568500.80	32°33'36.944"N	103°31'28.073"W	0.00	
12700.00†	89.036	179.580	11002.71	1811.97	-1811.92	13.27	790544.67	568400.82	32°33'35.954"N	103°31'28.074"W	0.00	
12800.00†	89.036	179.580	11004.39	1911.96	-1911.91	14.01	790545.41	568300.84	32°33'34.965"N	103°31'28.074"W	0.00	
12900.00†	89.036	179.580	11006.07	2011.94	-2011.89	14.74	790546.14	568200.85	32°33'33.976"N	103°31'28.074"W	0.00	
13000.00†	89.036	179.580	11007.76	2111.93	-2111.87	15.47	790546.87	568100.87	32°33'32.986"N	103°31'28.075"W	0.00	
13100.00†	89.036	179.580	11009.44	2211.91	-2211.86	16.20	790547.60	568000.89	32°33'31.997"N	103°31'28.075"W	0.00	
13200.00†	89.036	179.580	11011.12	2311.90	-2311.84	16.94	790548.34	567900.91	32°33'31.008"N	103°31'28.075"W	0.00	
13300.00†	89.036	179.580	11012.80	2411.89	-2411.82	17.67	790549.07	567800.93	32°33'30.018"N	103°31'28.076"W	0.00	
13400.00†	89.036	179.580	11014.49	2511.87	-2511.80	18.40	790549.80	567700.95	32°33'29.029"N	103°31'28.076"W	0.00	
13500.00†	89.036	179.580	11016.17	2611.86	-2611.79	19.13	790550.53	567600.97	32°33'28.040"N	103°31'28.076"W	0.00	
13600.00†	89.036	179.580	11017.85	2711.84	-2711.77	19.87	790551.27	567500.99	32°33'27.051"N	103°31'28.076"W	0.00	
13700.00†	89.036	179.580	11019.53	2811.83	-2811.75	20.60	790552.00	567401.01	32°33'26.061"N	103°31'28.077"W	0.00	
13800.00†	89.036	179.580	11021.22	2911.82	-2911.74	21.33	790552.73	567301.03	32°33'25.072"N	103°31'28.077"W	0.00	
13900.00†	89.036	179.580	11022.90	3011.80	-3011.72	22.06	790553.46	567201.05	32°33'24.083"N	103°31'28.077"W	0.00	
14000.00†	89.036	179.580	11024.58	3111.79	-3111.70	22.80	790554.20	567101.06	32°33'23.093"N	103°31'28.078"W	0.00	
14100.00†	89.036	179.580	11026.26	3211.77	-3211.69	23.53	790554.93	567001.08	32°33'22.104"N	103°31'28.078"W	0.00	
14200.00†	89.036	179.580	11027.95	3311.76	-3311.67	24.26	790555.66	566901.10	32°33'21.115"N	103°31'28.078"W	0.00	
14300.00†	89.036	179.580	11029.63	3411.74	-3411.65	24.99	790556.39	566801.12	32°33'20.125"N	103°31'28.079"W	0.00	
14400.00†	89.036	179.580	11031.31	3511.73	-3511.64	25.73	790557.13	566701.14	32°33'19.136"N	103°31'28.079"W	0.00	
14500.00†	89.036	179.580	11033.00	3611.72	-3611.62	26.46	790557.86	566601.16	32°33'18.147"N	103°31'28.079"W	0.00	
14600.00†	89.036	179.580	11034.68	3711.70	-3711.60	27.19	790558.59	566501.18	32°33'17.157"N	103°31'28.080"W	0.00	
14700.00†	89.036	179.580	11036.36	3811.69	-3811.59	27.92	790559.32	566401.20	32°33'16.168"N	103°31'28.080"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Lynch) Sec 23, T20S, R34E	Wellbore	No. 2H PWB
Facility	Lynch 23 Fed Com No. 2H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14800.00†	89.036	179.580	11038.04	3911.67	-3911.57	28.66	790560.06	566301.22	32°33'15.179"N	103°31'28.080"W	0.00	
14900.00†	89.036	179.580	11039.73	4011.66	-4011.55	29.39	790560.79	566201.24	32°33'14.189"N	103°31'28.081"W	0.00	
15000.00†	89.036	179.580	11041.41	4111.65	-4111.54	30.12	790561.52	566101.25	32°33'13.200"N	103°31'28.081"W	0.00	
15100.00†	89.036	179.580	11043.09	4211.63	-4211.52	30.85	790562.25	566001.27	32°33'12.211"N	103°31'28.081"W	0.00	
15200.00†	89.036	179.580	11044.77	4311.62	-4311.50	31.59	790562.99	565901.29	32°33'11.221"N	103°31'28.082"W	0.00	
15300.00†	89.036	179.580	11046.46	4411.60	-4411.48	32.32	790563.72	565801.31	32°33'10.232"N	103°31'28.082"W	0.00	
15400.00†	89.036	179.580	11048.14	4511.59	-4511.47	33.05	790564.45	565701.33	32°33'09.243"N	103°31'28.082"W	0.00	
15500.00†	89.036	179.580	11049.82	4611.57	-4611.45	33.78	790565.18	565601.35	32°33'08.253"N	103°31'28.082"W	0.00	
15510.58	89.036	179.580	11050.00†	4622.15	-4622.03	33.86	790565.26	565590.77	32°33'08.149"N	103°31'28.083"W	0.00	No. 2H PBHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 2H PBHL	15510.58	11050.00	-4622.03	33.86	790565.26	565590.77	32°33'08.149"N	103°31'28.083"W	point

SURVEY PROGRAM Ref Wellbore: No. 2H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	15510.58	NaviTrak (Standard)		No. 2H PWB